

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : B&B™ 3100
Product code : 3100

1.2. Recommended use and restrictions on use

Recommended use : Technical cleaning solvent
Restrictions on use : For industrial use only

1.3. Supplier

Vantage Specialties, Inc.
3938 Porett Drive
Gurnee, IL 60031
USA
T +1 847-244-3410
msds.pm.us@vantagegrp.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: 1-703-527-3887
(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 4	H227	Combustible liquid
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Carcinogenicity Category 2	H351	Suspected of causing cancer
Aspiration hazard Category 1	H304	May be fatal if swallowed and enters airways
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H227 - Combustible liquid
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H318 - Causes serious eye damage
H351 - Suspected of causing cancer

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - If swallowed: Immediately call a poison center or doctor.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Naphtha (petroleum), Heavy, Aromatic	CAS-No.: 64742-94-5	25 – 50	Asp. Tox. 1, H304
Hexylene Glycol	CAS-No.: 107-41-5	5 – 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319
4-Nonylphenol, branched, ethoxylated	CAS-No.: 127087-87-0	5 – 15	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Naphthalene	CAS-No.: 91-20-3	<5	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-Butoxyethanol	CAS-No.: 111-76-2	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures**4.1. Description of first aid measures**

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Risk of lung edema.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.
Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

B&B™ 3100

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up.
Incompatible materials : Strong acids. Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

4-Nonylphenol, branched, ethoxylated (127087-87-0)

No additional information available

Hexylene Glycol (107-41-5)

USA - ACGIH - Occupational Exposure Limits

Local name	Hexylene glycol
ACGIH OEL TWA [ppm]	25 ppm (vapor fraction)
ACGIH OEL STEL	10 mg/m ³ (inhalable particulate matter, aerosol only)
ACGIH OEL STEL [ppm]	50 ppm (vapor fraction)
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2021

USA - NIOSH - Occupational Exposure Limits

NIOSH REL C	125 mg/m ³
NIOSH REL C [ppm]	25 ppm

Naphtha (petroleum), Heavy, Aromatic (64742-94-5)

No additional information available

Naphthalene (91-20-3)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	10 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route

USA - ACGIH - Biological Exposure Indices

BEI	Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific)
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USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA [1]	50 mg/m ³
OSHA PEL TWA [2]	10 ppm

USA - IDLH - Occupational Exposure Limits

IDLH [ppm]	250 ppm
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USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA	50 mg/m ³
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B&B™ 3100

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Naphthalene (91-20-3)	
NIOSH REL TWA [ppm]	10 ppm
NIOSH REL STEL	75 mg/m ³
NIOSH REL STEL [ppm]	15 ppm
2-Butoxyethanol (111-76-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	20 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - ACGIH - Biological Exposure Indices	
BEI	200 mg/g Kreatinin Parameter: Butoxyacetic acid with hydrolysis - Medium: urine - Sampling time: end of shift
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	240 mg/m ³
OSHA PEL TWA [2]	50 ppm
Limit value category (OSHA)	prevent or reduce skin absorption
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	700 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	24 mg/m ³
NIOSH REL TWA [ppm]	5 ppm
US-NIOSH chemical category	SK: SYS-DIR(IRR) Apr 2011

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Color	: brown
Odor	: Solvent
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: 66.1 °C Pensky-Martens
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: 0.6 mm Hg (est)
Relative vapor density at 20°C	: No data available
Relative density	: 0.95
Solubility	: Dispersible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: None reported.
Oxidizing properties	: None reported.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

4-Nonylphenol, branched, ethoxylated (127087-87-0)

LD50 oral rat	1310 mg/kg
ATE US (oral)	1310 mg/kg body weight

Hexylene Glycol (107-41-5)

LD50 oral rat	3700 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 15 day(s))
LD50 dermal rabbit	12300 mg/kg
LC50 Inhalation - Rat	> 310 mg/m ³ (Exposure time: 1 h)

Naphtha (petroleum), Heavy, Aromatic (64742-94-5)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 590 mg/m ³ (Exposure time: 4 h)

Naphthalene (91-20-3)

LD50 oral rat	1110 mg/kg
LD50 dermal rabbit	1120 mg/kg
LC50 Inhalation - Rat	> 340 mg/m ³ (Exposure time: 1 h)

2-Butoxyethanol (111-76-2)

LD50 oral rat	470 mg/kg
LD50 dermal rabbit	435 mg/kg
LC50 Inhalation - Rat [ppm]	486 ppm/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Naphthalene (91-20-3)

IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen, Evidence of Carcinogenicity
In OSHA Hazard Communication Carcinogen list	Yes

2-Butoxyethanol (111-76-2)

IARC group	3 - Not classifiable
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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Hexylene Glycol (107-41-5)

NOAEL (oral, rat, 90 days)	450 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Risk of lung edema.

SECTION 12: Ecological information**12.1. Toxicity**

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Hexylene Glycol (107-41-5)

LC50 - Fish [1]	10500 – 11000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	2700 – 3700 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
ErC50 algae	> 429 mg/l Source: EHCA

Naphtha (petroleum), Heavy, Aromatic (64742-94-5)

LC50 - Fish [1]	19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

Naphthalene (91-20-3)

LC50 - Fish [1]	5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 - Crustacea [2]	1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])

2-Butoxyethanol (111-76-2)

LC50 - Fish [1]	1490 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [1]	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

12.2. Persistence and degradability**Hexylene Glycol (107-41-5)**

Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	2.2 g O ₂ /g substance
ThOD	2.3 g O ₂ /g substance

B&B™ 3100

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.3. Bioaccumulative potential

Hexylene Glycol (107-41-5)

Partition coefficient n-octanol/water (Log Pow)	< 0.14
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Naphtha (petroleum), Heavy, Aromatic (64742-94-5)

BCF - Fish [1]	61 – 159
Partition coefficient n-octanol/water (Log Pow)	2.9 – 6.1

Naphthalene (91-20-3)

BCF - Fish [1]	30 – 430
Partition coefficient n-octanol/water (Log Pow)	3.6

2-Butoxyethanol (111-76-2)

Partition coefficient n-octanol/water (Log Pow)	0.81 (at 25 °C)
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12.4. Mobility in soil

Hexylene Glycol (107-41-5)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
3082	3082	3082
14.2. Proper Shipping Name		
Environmentally hazardous substances, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.
Transport document description		
UN3082 Environmentally hazardous substances, liquid, n.o.s. (Naphthalene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Naphthalene), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Naphthalene), 9, III

B&B™ 3100

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT	IMDG	IATA
14.3. Transport hazard class(es)		
9	9	9
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available		

14.6. Special precautions for user

DOT	
Transport regulations (DOT)	: Exempt from regulation by US DOT when shipped in the USA solely by land in containers less than 119 gallons, refer to 49 CFR 173.150(f).
UN-No.(DOT)	: UN3082

IMDG	
Transport regulations (IMDG)	: Not regulated in containers less than 5 Liters capacity (IMDG 2.10.2.7)
Special provision (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A

IATA	
Transport regulations (IATA)	: Not regulated in containers less than 5 Liters capacity (IATA, SP A197)
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provision (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

B&B™ 3100

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

4-Nonylphenol, branched, ethoxylated	CAS-No. 127087-87-0	5 – 15%
Naphthalene	CAS-No. 91-20-3	<5%

Naphthalene (91-20-3)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
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15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases	
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

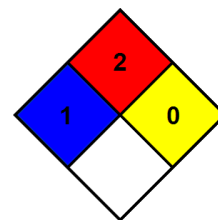
B&B™ 3100

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II IIIA)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: B - Safety glasses, Gloves

Vantage - Safety Data Sheet (SDS), USA

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